

CLAIMS

What is claimed is:

1. An apparatus for collecting an air sample from a vent comprising:
a collection bag having an interior and an exterior, said collection bag further defining a collection opening and an exit;
means for affixing said collection opening around an air conditioning vent;
a tubing for conducting air having an upstream end and a downstream end, the upstream end of said tubing affixed to the exit of said collection bag.
2. The apparatus according to claim 1 wherein said means for affixing comprise a fastener.
3. The apparatus according to claim 1 wherein said means for affixing comprise aluminum tape.
4. The apparatus according to claim 1 wherein said tubing is affixed to the exit of said collection bag so as to provide a substantially airtight seal therebetween.
5. The apparatus according to claim 1 wherein said collection bag is comprised of Teflon® or other inert material.

6. The apparatus according to claim 1 wherein said collection bag is comprises Tedlar®.
7. The apparatus according to claim 1 wherein said collection bag further defines an overflow escape.
8. The apparatus according to claim 1 further comprising a vacuum source applied to the downstream end of said tubing.
9. An apparatus for collecting an air sample from an aircraft air conditioning vent comprising:
 - a flexible collection bag defining an interior, an exterior, a collection opening, and an exit;
 - a fastener that affixes the collection opening of said collection bag around an aircraft air conditioning vent;
 - a flexible tubing having an upstream end and a downstream end, and the upstream end of said tubing affixed to the exit of said collection bag.
10. The apparatus according to claim 9 wherein said flexible tubing comprises in part aluminum tubing.

11. The apparatus according to claim 9 wherein the upstream end of said flexible tubing is affixed to the exit of said collection bag with aluminum tape.
12. The apparatus according to claim 9 wherein said fastener affixes the collection opening of said collection bag around an aircraft air conditioning vent so as to prevent air from the exterior of said collection bag, other than air provided by the vent, from entering the interior of said collection bag through the collection bag opening.
13. The apparatus according to claim 9 wherein the downstream end of said flexible tubing is affixed to a sample canister.
14. A method for collecting an air sample from an aircraft air conditioning vent comprising the steps of:
providing a collection bag having an interior and a collection opening with the collection opening affixed around an air conditioning vent;
attaching a tubing with an upstream end and a downstream end to a collection bag exit at the tubing upstream end;
applying a vacuum at the tubing downstream end.

15. The method according to claim 14 further comprising the step of providing air from an air conditioning vent to the interior of the collection bag.
16. The method according to claim 15 further comprising the step of adjusting the vacuum so as to allow the collection bag to inflate.
17. The method according to claim 15 further comprising the step of adjusting the amount of air provided from an air conditioning vent so as to allow the collection bag to inflate.
18. The method according to claim 15 wherein the airflow rate from the vacuum is less than the airflow rate from the air conditioning vent.
19. The method according to claim 14 further comprising the step of allowing air to escape from the interior of the collection bag through an overflow escape.
20. The method according to claim 14 further comprising the step of collecting an air sample at a canister.